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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/024,278	12/21/2001	Roger Spink	016790-0447	4914

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EXAMINER
FINEMAN, LEE A

ART UNIT	PAPER NUMBER
2872	

DATE MAILED: 02/14/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/024,278	SPINK, ROGER	
	Examiner	Art Unit	
	Lee Fineman	2872	

-- The MAILING DATE of this communication appears on th cover sheet with the correspondence addr ss --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-32* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-32* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *21 December 2001 and 24 July 2002* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the image measurement unit configured to measure the characteristic of the specimen image by directly measuring light emitted from the specimen and not refracted by the main optical system must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

3. Claim 7 is rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claim 7, recites the limitation "wherein the image measurement unit configured to measure the characteristic of the specimen image by directly measuring light emitted from the specimen and not refracted by the main optical system." It is unclear from the specification and drawings how

the image measurement unit is able to measure characteristics of the specimen without the light being refracted by the main optical system.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-19 and 21-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Fantone et al., U.S. Patent No. 4,786,154.

Regarding claims 1, 6-7, 13, 21, and 22, Fantone et al. discloses a device for controlling a characteristic of an image signal superimposed on a specimen image (fig. 2) comprising: a main optical system (12, 13, 14), which is a microscope, configured to refract light emitted from a specimen (10) into a main beam path (not numbered from 10 to 22); a superimposition apparatus (42), which is a display, in a fixed relationship to the main optical system (fig. 2) to a viewer (after 22), configured to generate the image signal; a superimposing reflector (46) configured to reflect the image signal generated by the superimposition apparatus into the main beam path and to superimpose the image signal onto the specimen image (column 4, lines 24-31); an image measurement unit (38), which is a CCD, in a fixed relationship to the main optical system (fig. 2), configured to measure a characteristic of the specimen image (column 2, line 61-column 3, line 5); a controller configured to adjust, with a control signal, a characteristic of the image signal generated by the superimposition apparatus in response to a measurement by the image

measurement unit of the characteristic of the specimen image; wherein the image measurement unit is configured to measure characteristics of those individual regions that are in a viewer's line of sight (column 3, line 5-column 4, line 16) and a manual input unit for providing a manual input signal from a viewer to the controller, wherein the controller is configured to adjust the characteristic of the image signal generated by the superimposition apparatus in response to the manual input signal and the measurement by the image measurement unit (part of 40, in so far as there must be some manual input and therefore a manual input unit to provide input direction about which characteristic to enhance). The method of utilizing the structure of the claim is inherent therein. Additionally, in as much as the claim7 is able to be understood in light 35 U.S.C 112 rejection made above, Fantone et al. meets the structural requirements set forth and therefore anticipates claim 7.

Regarding claims 2-3 and 23, Fantone et al. further discloses wherein the characteristic of the specimen image and the characteristic of the image signal are brightness and the image measurement unit is configured to measure a spatial brightness distribution of the specimen image (column 3, lines 21-26).

Regarding claims 4-5, Fantone et al. further discloses wherein the characteristic of the specimen image and the characteristic of the image signal are one of color and contrast and the image measurement unit is configured to measure a spatial color or contrast distribution of the specimen image (column 3, lines 43-51).

Regarding claim 8, Fantone et al. further discloses wherein the image measurement unit is configured to measure the characteristic of the specimen image by measuring light emitted from the specimen and refracted by the main optical system into the main beam path (fig. 2).

Regarding claims 9 and 24, Fantone et al. further discloses a beam splitter (32) configured to reflect a portion of the specimen image from the main beam path to the image measurement unit.

Regarding claims 10 and 14, Fantone et al. further discloses wherein the image measurement unit is configured to measure a characteristic of the entire specimen image and the controller is configured to adjust a characteristic of the entire image signal generated by the superimposition apparatus in response to the measurement by the image measurement unit (column 3, lines 9-14).

Regarding claims 11-12, 15-16 and 25-26, Fantone et al. further discloses wherein the image measurement unit is configured to measure characteristics of individual regions of the specimen image, wherein the controller is configured to adjust characteristics of individual regions of the image signal generated by the superimposition apparatus in response to the measurement by the image measurement unit, and wherein the individual regions are individual pixels (column 5, lines 27-42).

Regarding claims 17-18, Fantone et al. further discloses wherein the controller is configured to adjust characteristics of individual pixels of the image signal generated by the superimposition apparatus in response to measurements by the image measurement unit of the characteristics of the corresponding pixels of the specimen image and wherein the controller is configured to adjust characteristics of individual regions of the image signal generated by the superimposition apparatus in response to measurements by the image measurement unit of the characteristics of the corresponding regions of the specimen image (column 3, line 63-column 4, line 9).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fantone et al in view of Grund et al., U.S. Patent No. 6,217,519 B1.

Fantone et al. discloses the claimed invention except wherein the manual input unit is operable remotely from the device. Grund et al. teaches a system that combines images (fig.1, column 3, line 65-column 4, line 8) and has a manual input unit (22) that is operable remotely from the device (column 4, lines 12-19). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the manual input unit of Fantone et al. operable remotely from the device as suggested by Grund et al. to provide a more flexible working area.

8. Claims 27-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fantone et al. in view of Marino et al., U.S. Patent No. 5,307,202.

Regarding claims 27, and 29-32, Fantone et al. discloses the claimed invention except for explicitly stating that the superimposition apparatus is automatically adjusted in response to a measurement by the image measurement unit of the characteristic of the specimen image. Marino

et al. discloses a device for controlling a characteristic of an image signal superimposed on a specimen image (fig. 1) wherein the superimposition apparatus (11) can be automatically adjusted via software (column 2, lines 40-51). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the superimposition apparatus of Fantone et al. automatically adjust the characteristic as suggested by Marino et al. to provide faster adjustment times.

Regarding claim 28, Fantone et al. further discloses the microscope being a surgical stereomicroscope (column 1, lines 7-8).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lee Fineman whose telephone number is (703) 305-5414. The examiner can normally be reached on Monday - Friday 7:30 - 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cassandra Spyrou can be reached on (703) 308-1687. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9318 for regular communications and (703) 872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4900.

LAF
February 10, 2003

MARK A. ROBINSON
PRIMARY EXAMINER